

4A: The Management of Nearshore Habitats

Questions & Answers

Q: I worked on the Bainbridge Shoreline Plan, and when we did that, I know, I had a great deal of difficulty finding information about the impacts of docks, particularly on salmon. I heard allusions to that, but even in querying fisheries scientists I couldn't get much definitive information. This was a couple of years ago. Did you find, in your looking at that issue, that there actually are some studies that clearly document impacts of docks on migration of salmonids?

Broadhurst: There is very little and it is one of the issues that came up. People said that there seems to be more knowledge out there than is being put in the literature. And I think it's a matter of agency staff, particularly Department of Fish and Wildlife technical staff, who are out there and seeing a lot of things, it's really hard for them to get the time to put this stuff down on paper and document it. And I think there's a real crying need. There are a couple of references that I would be glad to show you and I could send you a copy of the final report.

Comment: Just for your information, this year the WSDOT is funding an effort to look at exactly that issue; over water structures and fish movement. And the first thing is going to be a workshop, I think it's on April Fool's Day, in fact, where people who know something or are interested in this, will get together and lay the data on the table and throw away the myth. Let's see what we really understand, and let's see what we need to find out. So it's going to happen this year.

Comment: Annette Olson at the University of Washington is one of the main people that I know of looking at over water structures.

Comment: The other comment I had, based on the Bainbridge Island experience, is that one of the biggest hindrances to making improvements, particularly in individual family housing building, is the grandfathering that gets factored in when you have very minimal setbacks of everybody else and you have one vacant lot there's a very strong political argument that they can also be 25 feet from the shoreline and that tends to be kind of a domino effect to keep everybody right up close to the shoreline.

Comment: My name is Bob Duffy. I just had a couple of observations. I think that the methods that you showed for minimizing impacts to the marine shoreline could also be translated, to a large extent, to upland areas, rivers and lakes, as well. So for folks that are involved in the development of regulations, that might be something to consider. And then my second observation is that I've been continually frustrated with the tracking of cumulative impacts which was one of the things that the SEPA regulations in the state of Washington have been designed to do. And I just feel like we should encourage jurisdictions that are issuing permits to take a little bit more responsibility for tracking cumulative impacts. I don't think that they have to take the full burden of doing that, but they need to start contributing somehow to maybe putting down the length of the dock in a database somewhere, or the length of a bulkhead somewhere. And eventually translating, through some policy or regulation, how they want to manage that information on the cumulative impacts.

Broadhurst: One thing that I heard from the locals, and this was up in San Juan County, I particularly remember, they really want to know how they can limit docks. The biggest tool they had was viewshed, and if it was interfering with somebody's view, then they had means of limiting that dock project. But they are crying out for more information on how to be trained or how to understand how to use regulations in a cumulative way. That seemed to be a huge need.

Comment/Question: My name is John Houghton with Pentec Environmental. I wanted to respond to the lady's comment back here. We actually did a study for the Port of Everett last spring on effects of

finger piers on juvenile salmon migration. I'd be happy to share that with anybody, and also to participate in this DOT thing. One thing that comes to mind in looking at some of the pictures that Colin showed about the Fraser River Delta, and I've seen it elsewhere where people do these nice habitat creations along the shoreline of estuaries, and then they feel compelled to put logbooms to protect those areas from wood debris. I would maintain, based on our observations of juvenile salmon movement, that those same log booms will very effectively preclude salmon from using those areas if they are fully intact, the fish will just swim right along the logbooms as if that were the shoreline. Who is organizing this thing on the 1st?

A: Si Simenstad is organizing it.

Comment: One observation. I was thinking when Ron was giving his talk that he was analyzing the whole, you know, how do you do restoration, and I thought we should be looking at all of our shoreline that's already intact and making sure that those pieces of it are in place. Maybe that should be model for our management. We seem like we might be holding restoration sites to a much higher standard than we are the rest of the shoreline.

Comment: My name is Peter Bahls. I'm a habitat biologist for Port Gamble Tribe, so I get to review some of these permits and work with the state habitat biologists, and I'd just like to thank you for your talk. I think what you are talking about is one of the most ignored aspects right now of habitat protection. It's incredible to me that we still get all these bulkhead permits, all these dock permits coming through. And we know the cumulative effects, and supposedly we have SEPA to regulate this, and yet these permits routinely go through SEPA and there's no way to stop them. And one thing I just wanted to mention is you didn't mention DOE's recent, I think it was a two year report of the cumulative effects of bulkheading, and that hasn't seemed to trickle down in terms of a regulatory effect at all.

Broadhurst: I'm amazed at it too. I think a lot of waterfront owners think that it's, well, it's been considered their right to do a lot of development activities, and certainly that's the way the state Shoreline Management Act was written.

Q: I'm Doug Bulthuis. I work for the Padilla Bay Research Reserve. I think it was your last slide that emphasized the fact that there are so many different jurisdictions throughout Puget Sound. Implicit in what you said was that we'd be better off if there was one jurisdiction, or if we would regulate everything through one level, and I think it's a natural tendency I have too. If we had it all together, then we could do it. And yet, I'm not so sure that that's always true, and I wondered if you have really looked at that assumption that we would be better off, and are there examples of it, if it's regulated, for example, at state level compared to now where we have many jurisdictions?

Broadhurst: That's a good comment. I don't really think that state management of the shoreline is the answer. I think there's a tremendous amount to be said for local control and ability to have some flexibility. I think what happens though, and it's the same thing with critical areas ordinances that are at the local level, there can be so much variability. Some variation is OK, but what concerns me is that we'll have some impacts on this 30 miles of shoreline and they don't know what's happening above their jurisdiction's line. And so there needs to be some sort of complement, I think, of some entity that is looking more holistically at the whole picture. Maybe just a permit tracking system for the entire Sound, or something along those lines. I'm not sure, there certainly are no easy answers here, but I appreciate what you're saying.

Panelist Comment: I think that the issue here, and if you look at it in this way, it might change our perspective. The resources that we're trying to protect here, the resources that are supported by the nearshore marine habitat, are sort of public trust resources. They are fisheries and wildlife resources which, basically, belong to the whole state, and what the local jurisdictions are trying to do is to manage

their local land-based resources, which they perceive as within their jurisdiction. So there is a conflict that we haven't resolved yet.

Broadhurst: There were several shoreline managers who I talked to who really wanted to know more about the nearshore and they just didn't have that habitat expertise, so I think that whatever we can do to help those folks who don't have that sort of training could go a long way.

Q: Ginny, just really quickly, I'm wondering whether it makes sense to introduce the "W" word, "watersheds," to this conversation in thinking of the answer to Doug's question about the best jurisdiction. I haven't heard it in this conversation, which is sort of unusual these days. Is there a way of organizing or thinking about nearshore on some landscape ecosystem watershed scale.

Broadhurst: One of the recommendations that came out through our work group report was to make sure that the nearshore is included in watershed process, so that whoever is looking at a watershed analysis or managing at the watershed level would go beyond the water's edge, and I think that's important, but again that still slices it up. There still needs to be somebody who's looking at the whole basin of Puget Sound and that shoreline. So, look at it both ways, I guess.

Freidman-Thomas: I was struck by the difference on what your first pass using GIS produced for you in terms of the distribution and the lack of connectivity of your priority restoration sites vs. what you came up with once you went into the field. And I would like to ask about your thinking about that seeming disparity.

White: There are two reasons for that. The most obvious reason is that the sewer plant had already identified a lot of the sites in the center of that area. And the other reason is that I don't yet know and our GIS team does not yet know how to program connectivity into a query for sites. In other words, you have attributes in a table, but I'm not sure, I think there is a spatial analysis tool that is now available for GIS, it's at low level GIS, which is what we're using, that you can use to identify the proximity of sites and that was a filter that wasn't applied. And so what we did is we used a human element to apply that filter in developing the second plan. That was not used.

Q: Do you know what could be achieved with the final vision? Do you have selling point to say, if we were able to restore all of these wetlands, we would never have a flood in the Snohomish River again, or anything along outrageous statements like that?

White: Actually, we'd probably be more likely to predict flooding protection than things like gain in salmon number. I was asking about that yesterday in another session. I think that if we could somehow identify numbers of wildlife or numbers of fish gained per unit restoration effort, we'd go a long way toward getting money for projects.

Q: Have you measured salinity to provide information on water movement in the breach area and have you investigated sediment loads going out into the system after the breach occurred?

A: Yes, we've been taking some salinity measurements. We've got some sediment stations that we have installed with the help of Si Simenstad and Wendy Morrison of the Louisiana Marine Consortium. We also have a number of volunteer efforts going on with Adopt a Beach looking for *Spartina* invasions. We have the Black Hills Audubon Society following and tracking migratory waterfowl making new use of the mud flats. We feel it's appropriate to involve as much of community outreach as we can to attract these. We have vegetation transects, both permanent and some rotating, that we've been looking at changes in the system as the tidal inundation is becoming more and more. But it's just one breach of 10 to 12 that need to be done in order for the system to start to return.

Q: Ginny, you mentioned that there were 50-odd jurisdictions. It seemed like what you were

crying out for was integrated coastal zone management to bring together the parties, the stakeholders. I'm with Fisheries and Oceans in Canada, and my name is Steve Samis. Our minister is, according to the Oceans Act, to lead and facilitate in integrated coastal area management on the three coasts of Canada, and that would seem to say to me that we, as a federal body, are responsible for providing that point of leadership. And I think on of the places where we're going to focus will be Georgia Strait. And presently we have the same mix of jurisdictions that you have. And from your experience in Puget Sound, could you offer us some advice on how to begin this integrated coastal zone management in Georgia Strait?

Broadhurst: I'm not really sure how to answer that question. I think one thing that's true in the Puget Sound area is that there are certainly pros and cons of having local jurisdictions have a considerable amount of authority over their own shoreline. This area has always had a strong local control and so I guess what I am calling for is that coordinated system to evaluate effects rather than what I think is piecemeal right now. I think in any sort of integrated process, it's really important to make sure that the local jurisdictions are comfortable with and understand the reasons for the management. Around here, I think if we had the federal government or the state government just come in and say this is what you will do, and there's no ifs ands or buts, that wouldn't work real well. So I think you have to divvy up the management responsibilities so that everyone understands why you're doing what you're trying to do and as I mentioned I think that that education piece of why you're doing that, you know, these regulations are important because these are the marine resources that use this area and we're trying to protect those and make sure that your populace really understands that that's your mission.

Comment: My name is Jim Johannesson with Coastal Geologic Services. I just had a question or a comment following up on some of the ideas we're heard about management levels, local, we've got obviously state, and others, federal and of course we've got the private homeowners level which is so important for nearshore habitat and many of the other things that we've talked about. But there's one other level that I haven't heard talked about that's slowly coming out which is his neighborhood and/or subdivisions and/or local community groups and/or ten homeowners that happen to live next to each other. And as there's more and more education out there, people become aware of the impacts they're having, the need to satisfy permit requirements, that they can't act alone in a 50-foot stretch. I think that's one thing we need to further through another approach, another way to manage these. Well, all the people that want to hear from government, well talk to your neighbors. And that's more affordable for them, it's more effective. It's also more effective from the resource standpoint. Trying to minimize erosion, water quality, drainage impacts, things like that.

Broadhurst: Jim, you didn't tell everybody what you do, which is he's done a series of really successful workshops working with landowners. And I think you've probably had a lot of success in having those sorts of projects work. I've found, in talking with some of the local shoreline managers, that while they have it on the books that they encourage joint use of docks or joint stairways, those sorts of things, they have a really hard time making it work. And I'm not sure why. Whether it's just a liability question or they haven't really had the time to bring everyone together to explain why it would be helpful or not. I hope we can get towards those sorts of solutions.

Johannesson: It's certainly not a cure all and there are a lot of neighbors it's not going to work with, but when it works, it works well, and it's great to have an existing structure, but it isn't always required.

D. Peeler: I just wanted to extend my appreciation for the work that you've all done in identifying these tools, coming up with the information and the plans, really, for these critical nearshore and estuarine areas. It's really great. We've known how critical these are to wildlife for several years, a really long time, but we haven't had this kind of information to help push that ahead in the public arena. But I do have a question for Jacques. You talked about the Snohomish Estuary Plan, there, and I know it's probably a little early in the public review process and so on to get some sense of how you think that's going to be received. That would be one question. And the kind of partnerships that you might be able to form to

get some of those areas into the system. But have you looked at the expense yet, or the costs of the proposals that you've generated here?

White: No, because that is really contingent on whatever value a particular landowner is going to put on their land. The restoration projects are really not terribly expensive. It'd be probably in the hundreds of thousands of dollars to liberate some of those 200 to 300 acre parcels of land by breaking dikes. The land acquisition is an interesting issue and the prices vary depending on what people think the market will bear for those properties. I can't go beyond that. I don't know. Jim Kramer, who along with a large number of different groups, is developing a program to identify restoration targets within the Puget Sound basin. Not necessarily just restoration, but restoration and acquisition targets throughout the watersheds in the Puget Sound basin, is guessing at a billion dollars to restore fish and wildlife habitat in the Puget Sound basin over the next ten years if we want to be successful in preventing EPA listings. The Snohomish, I don't know. I'd guess we're talking tens of millions of dollars at least.

D. Peeler: Yes, it seems like it's going to be a big number, a hard one to beat around the Sound. Obviously, looking at a combination of conservation easement type of purchases as opposed to outright land purchases can maybe help to defray part of that cost, and I think in a lot of cases people might be willing to enter into that kind of agreement. But you know as well as I do that it's a long road to get there. Thanks.